

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 10

1200 Sixth Avenue Seattle, WA 98101

Reply To Attn Of:

OW-130

FINDING OF NO SIGNIFICANT IMPACT (FONSI)

To all interested government agencies, public groups, and individuals:

In accordance with the Environmental Protection Agency (EPA) procedures for complying with the National Environmental Policy Act (NEPA), 40 CFR Part 6, Subpart F, EPA has completed an environmental review of the following proposed action:

Forest Oil, formerly Forecenergy, Redoubt Shoal Unit Oil and Gas Production Development Project

in Cook Inlet, Alaska

EPA Role and Responsibility:

Forest Oil Corporation applied for an individual New Source National Pollutant Discharge and Elimination System (NPDES) wastewater discharge permit on February 25, 2000. According to NPDES regulations at 40 CFR 122.29 (c)(i), the potential issuance of an NPDES permit to a new source "(subjects) the (proposed project) to the environmental review provisions of the NEPA as set out in 40 CFR Part 6, Subpart F."

EPA has prepared the attached Environmental Assessment (EA) to ascertain whether the proposed project would have a significant impact on the quality of the human environment. Based on the findings of the EA, EPA determines whether to approve or deny the NPDES permit application. EPA's finding on whether to approve or deny the NPDES permit can be found in the last section of this FONSI.

EPA's Limited Authority and Jurisdiction

As a result of court case law, EPA can only implement mitigation measures or conservation recommendations pertaining to water quality NPDES discharge permit conditions. Please refer to court case entitled *Natural Resources Defense Council v. Environmental Protection Agency (NPDES Litigation), D.C. Circuit, No. 80-1607 and consolidated cases*, which 'invalidated regulations (EPA NEPA implementing regulations (40 CFR Part 6)) that allowed the Agency to impose conditions unrelated to effluent limitations in (NPDES) permits." Thus, EPA's area of authority and jurisdiction on the proposed Forest Oil project lies with the protection of water quality through issuance or denial of the NPDES permit.

EPA's NEPA implementing regulations (40 CFR Part 6) require that EPA disclose all environmental predicted environmental effects and mitigation measures whether or not EPA has

the authority to implement or regulate those mitigation measures or environmental effects. The EA discloses the agency or agencies that have the authority to implement mitigation measures not within EPA's jurisdiction. In this FONSI, a brief synopsis is presented of the mitigation measures that should be implemented by the various Federal or State Agencies in their respective permits or authorizations to protect an environmental resource.

Purpose and Need of Action:

The purpose of the proposed project is to develop oil and gas reserves located in 45 feet of water and 1.8 miles southeast of the tip of the West Forelands in Central Cook Inlet. The proposed project anticipates production of up to 25,000 barrels of crude oil per day and 4.3 million cubic feet per day of natural gas. The crude oil will be sent via pipeline to the Trading Bay Production Facility where it will be tied into the existing Cook Inlet Pipe Line Company system, and then transported to the Drift River Facility. The oil will then be sent by tanker to either local, domestic, or foreign markets.

The need for the action is to allow Forest Oil Corporation to develop oil and gas reserves at a reasonable profit and to meet world market demands for oil and gas. The proposed project will increase declining Cook inlet oil production (currently below 30,000bareels per day) by approximately 90 percent.

The Preferred Agency Alternative

EPA's Agency Preferred Alternative is Alternative 1- The Proposed Project. Alternative 1-The Proposed Project can be briefly characterized in this FONSI as consisting of the following components (please refer to the attached EA for detailed project information):

- < Conversion of the Osprey Platform from a manned exploratory platform to a minimally manned production platform.
- Production drilling operations using freshwater-based and oil-based drilling fluids. All drilling muds and cuttings will be disposed of with on-platform grind and injection facilities.
- Construction of a new oil production facility (Kustatan Production Facility) located near Kustatan on the West Forelands for oil separation and produced water treatment for reinjection offshore.
- Transportation of crude oil and natural gas from the Redoubt Shoal Unit to the onshore Kustatan Production facility via a 1.8 mile onshore pipeline and a 1.8 mile offshore pipeline. An access road will be constructed along the route of the onshore pipeline.

Other Alternatives Considered and Evaluated in EA

Three additional alternatives were identified and evaluated:

< Alternative 2: Includes conversion of the Osprey Platform to production operations, construction of an onshore production facility, and construction of a 3.3 mile offshore pipeline from the Osprey Platform to the proposed Kustatan production facility. No onshore pipeline or access road would be constructed.</p>

- < Alternative 3: Includes conversion of the Osprey Platform to production operations and construction of a 10.5 mile offshore pipeline from the Osprey Platform to the Trading Bay Production Facility. No onshore production facility or onshore pipeline would be constructed in the West Forelands area; a 0.1 mile onshore pipeline would be constructed at Trading Bay.</p>
- < Alternative 4: No action.

<u>Summary of Predicted Environmental Effects of the Agency Preferred Alternative and</u> Other Alternatives Evaluated in the EA

Alternatives 1, 2, and 3 would all have similar potential impacts on the marine environment associated with offshore activities (e.g., Osprey Platform and offshore pipelines) if a major oil spill were to occur. While mitigating measures can be employed to minimize the probability of a major oil spill, smaller oil spills are likely to occur and the risk of a major spill can not be eliminated. Alternative 2 (offshore pipeline to Kustatan) and Alternative 3 (offshore pipeline to Trading Bay) have a higher likelihood of pipeline rupture due to the increased length of the offshore pipeline. Alternative 1 (Agency Preferred Alternative) is expected to have the lowest predicted level of adverse/significant impacts resulting from offshore activities.

Onshore impacts, including impacts on water quality, are highest for Alternative 1 (Agency Preferred Alternative) due to potential impacts from construction of the near shore and onshore pipeline and access road and the onshore production facility. Leaks and spills from the onshore pipeline are predicted to have minor impacts to terrestrial biota. Alternative 2 (offshore Pipeline to Kustatan) and Alternative 3 (offshore pipeline to Trading Bay) does not involve construction of the access road or onshore pipeline, and therefore would have no terrestrial impacts. The predicted onshore impacts can be mitigated by : 1) minimizing wetland crossings and conducting wetlands mitigation and restoration activities as specified by a Corps of Engineers Wetlands Permit and 2) routine maintenance and monitoring of onshore pipeline integrity.

Based on the analysis of predicted environmental impacts presented in the EA (Section 4 and Table 5-1 of EA), Alternative 1 (Agency Preferred Alternative) would also be considered the environmentally-preferred alternative when compared to the environmental effects of the other alternatives.

With proper mitigation and under the permit authority of other federal and/or state agencies, onshore impacts of the proposed project can be effectively mitigated and environmental impacts are not predicted to be significant. Offshore impacts are lowest for the proposed project; while the potential for a major oil spill cannot be eliminated, the proposed project minimizes the offshore pipeline length and employs a variety of mitigation measures as described in Section 4 of the EA. Therefore, potential adverse impacts on water quality and the marine environment are not predicted to be significant for Alternative 1 (Agency Preferred Alternative).

Mitigation Measures:

The following mitigation measures have been identified in the EA to lessen the potential for adverse environmental impact to an environmental resource. In accordance with NEPA, EPA has identified in this section of the FONSI the state or federal agency that may have the authority/jurisdiction to impose a particular mitigation measure to lessen the impact to a particular environmental resource. Some mitigation measures identified may not have an agency with

authority or jurisdiction for imposing that mitigation measure. EPA has identified to the best of it's abilities the agencies with authority or jurisdiction for mitigation measures.

EPA can not require a particular agency to require the applicant to implement a particular mitigation measure. The information provided on mitigation measures under the authority and jurisdiction of another agency are provided to the general public as a requirement of EPA's implementing NEPA regulations (40 CFR Part 6.) The mitigation measures for protection of water quality are EPA's primary authority and jurisdiction. Therefore, all mitigation measures that have been identified to lessen the potential impact to water quality are to become binding NPDES permit conditions on the applicant.

Geology and Soils:

The following mitigation measures will minimize the potential for environmental impacts related to geology and soils:

- Preplacement of side-scan sonar and shallow sub-bottom geophysical surveys to avoid boulder or rocky areas to the extent possible.
 - <u>Jurisdictional Agency</u>: Alaska Oil and Gas Conservation Commission (AOGCC) and/or United States Army Corps of Engineers (USCOE)
- Shallow borings to determine whether the intertidal segment can be placed by boring (preferred) rather than by trenching.
 - <u>Jurisdictional Agency</u>: Alaska Oil and Gas Conservation Commission (AOGCC) and/or United States Army Corps of Engineers (USCOE)
- Use of current industry standards for pipelines/utilities in locations such as Cook Inlet.
 - <u>Jurisdictional Agency</u>: United States Department of Transportation (DOT) Office of Pipeline Safety
- Burial of the pipeline in the intertidal and shallow subtidal areas.
 - <u>Jurisdictional Agency</u>: United States Department of Transportation (DOT) Office of Pipeline Safety and/or United States Army Corps of Engineers (USCOE)
- Use of periodic side scan sonar surveys (at least every 2 years) to inspect the integrity of the pipelines and conduct remedial actions (typically sandbagging) if potential problems (i.e., excessive spans or impingement on boulders) are observed.
 - <u>Jurisdictional Agency</u>: United States Department of Transportation (DOT) Office of Pipeline Safety
- Use of standard erosion control measures for access roads.
 - <u>Jurisdictional Agency</u>: EPA Storm Water Program

Air Quality:

Appropriate mitigation measures include:

• Development of an air monitoring program.

<u>Jurisdictional Agency</u>: State of Alaska Department Of Environmental Conservation (ADEC) with EPA Air Program Oversight

• Use of best available technology to minimize emissions from the platform and the onshore production facility.

<u>Jurisdictional Agency</u>: State of Alaska Department Of Environmental Conservation (ADEC) with EPA Air Program Oversight

Water Quality Protection for NPDES Discharge

The following mitigation and monitoring measures have been identified to minimize potential impacts to water quality from the NPDES discharge (all mitigation and monitoring measures identified in this section of the FONSI are binding NPDES permit conditions upon Forest Oil):

- Forest Oil shall limit and monitor discharges from the Osprey Platform as specified in Table 1 of NPDES permit AK 0053309 (Table 1 is attached to this FONSI). Forest Oil shall comply with the effluent limits in the table at all times unless otherwise indicated, regardless of the frequency of monitoring or reporting required by other provisions of this permit.
- Unless specifically addressed in Table 1, Forest Oil shall not discharge floating solids, debris, sludge, deposits, foam, scum, or other residues of any kind in concentrations causing nuisance, objectionable, or detrimental conditions or that make the water unfit or unsafe for use.
- Forest Oil shall minimize the discharge of surfactants, disperants, and detergents except as necessary to comply with the saeft requirements of the Occupational Health and Safety Administration and the Minerals Management Service (MMS). The discharge of disperants to marine waters in response to oil or other hazardous waste spills is not authorized by this permit.
- Forest Oil shall not discharge diesel oil, halogenated phenol compounds, trisodium nitrilotriacetic acid, sodium chromate, or sodium dichromate.
- Forest Oil shall maintain an inventory of the type and quantity of biocides and chemicals added to non-contact cooling water. Each annual inventory must be assembled for the calendar year and submitted to EPA by March 1 of the following year.
- Forest Oil shall separate area drains for washdown and rainfall that may be contaminated with oil and grease from those area drains that would not be contaminated. The deck drainage contaminated with oil and grease must be processed through an oil-water

separator prior to discharge. Samples for the deck drainage discharge that are collected from the oil-water separator must be tested for sheen.

- Forest Oil is not required to conduct monitoring for the facility if it is not staffed. Forest Oil must provide EPA and DEC written notification that the facility is no longer staffed prior to terminating monitoring requirements.
- Forest Oil shall discharge domestic and sanitary wastes below the water surface.
- If any discharges are commingled, then the most stringent effluent limitations for each individual discharge are applied to the resulting discharge. If the individual discharge is not authorized, then the commingled discharge is not authorized.
- Forest Oil shall maintain the pH range of all discharges between 6.5 and 8.5 standard units. Forest Oil shall monitor pH in all discharges monthly.
- Forest Oil shall not discharge in water depths less than 5 m (as measured from mean lower low water).
- Forest Oil shall not discharge within the boundaries or within 1000 m of coastal marsh, river delta, river mouth designated as Area Meriting Special Attention (AMSA), game refuge, game sanctuary, or critical habitat area. The seaward edge of a coastal marsh is defined as the seaward edge of mergent wetland vegetation.

Water Quality Protection Due to Accidents

The following actions have been identified to minimize the potential for an oil spill and to mitigate potential impacts on water quality if a spill were to occur:

Monitoring to ensure compliance with water quality standards.

<u>Jurisdictional Agency</u>: Alaska Department of Environmental Conservation (ADEC) Water Quality Division

• Monitoring to ensure compliance with the NPDES permit.

Jurisdictional Agency: EPA NPDES Program

• Installation of overfill protection and secondary containment to mitigate potential diesel tank ruptures.

<u>Jurisdictional Agency</u>: Department of Interior (DOI) and Minerals Management Service (MMS)

Use of blowout preventers and monitoring of drilling mud weight to minimize the potential for a well blowout.

Jurisdictional Agency: Alaska Oil and Gas Conservation Commission (AOGCC)

• Installation of a SCADA monitoring and control system.

<u>Jurisdictional Agency</u>: Alaska Oil and Gas Conservation Commission (AOGCC)

Internal and external monitoring of pipelines.

<u>Jurisdictional Agency</u>: United States Department of Transportation (DOT) Office of Pipeline Safety

• Preparation and adherence to an ADEC-approved Oil Discharge Prevention and Contingency Plan (C-Plan). This plan will be formatted in accordance with ADEC regulations (18 AAC 75) and describes specific methods to prevent, detect, and respond to spills in the event they occur. The C-Plan will be prepared and approved prior to initiation of production operations.

<u>Jurisdictional Agency</u>: Alaska Department of Environmental Conservation (ADEC)
Spill Prevention and Response Office

• Preparation and adherence to Facility Response Plans (FRPs) for the Minerals Management Service (per 30 CFR 250 and 254), the Research and Special Programs Administration (per 49 CFR 194), and the U.S. Coast Guard (per 33 CFR 154) as required by the Oil Pollution Act of 1990. The FRPs will be incorporated into the ADEC C-Plan with appropriate cross-references.

Jurisdictional Agency: Minerals Management Service (MMS), Research and
Special Programs Administration, U.S. Coast Guard, and Alaska
Department of Environmental Conservation (ADEC)
Water Quality Division

• Preparation of a Spill Prevention Control and Countermeasure (SPCC) Plan as required by the USEPA (per 40 CFR 112) for both the offshore platform and onshore production facility. The SPCC will also be incorporated into the ADEC C-Plan.

<u>Jurisdictional Agency</u>: Department of Interior (DOI) and Minerals Management Service (MMS)

Maintain membership in the Cook Inlet Spill Prevention and Response, Inc. (CISPRI), a
federally-approved Oil Spill Removal Organization (OSRO). CISPRI currently
maintains a response capability to handle in excess of a 50,000-barrel spill in Cook Inlet
waters.

<u>Jurisdictional Agency</u>: Minerals Management Service (MMS), U.S. Coast Guard, and Department of Transportation Office of Pipeline Safety

Freshwater Resources:

Applicable mitigation measures include the following:

 Use of sediment barriers and other construction techniques (e.g., limited disturbance of surficial organic soils and avoidance of steep cuts) in the vicinity of wetlands to minimize erosion and sedimentation.

Jurisdictional Agency: United States Corps of Engineers 404 Wetlands Permit

Marine Biological Resources, Threatened and Endangered Species, and Terrestrial Biological Resources:

The following applicable mitigation measures have been identified to minimize environmental impacts on marine biological resources, Threatened and Endangered Species, and Terrestrial Biological Resources:

• Timing of construction activities to avoid bird nesting periods.

Jurisdictional Agency: None Identified to Date by EPA

• Monitoring of water quality to ensure compliance with water quality criteria.

Jurisdictional Agency: EPA, NPDES Permits Program

• Installation of overfill protection and secondary containment on tanks.

<u>Jurisdictional Agency</u>: Department of Interior (DOI) and Minerals Management Service (MMS)

• Use of blowout preventers and monitoring of drilling weight to minimize the potential for a well blowout.

Jurisdictional Agency: Alaska Oil and Gas Conservation Commission (AOGCC)

• Installation of a SCADA monitoring and control system.

<u>Jurisdictional Agency</u>: Alaska Oil and Gas Conservation Commission (AOGCC)

Internal and external monitoring of pipelines.

Jurisdictional Agency: Department of Transportation Office of Pipeline Safety

• Use of periodic side scan sonar surveys (at least every 2 years) to inspect the integrity of the pipelines and conduct remedial actions if potential problems are observed.

<u>Jurisdictional Agency</u>: Alaska Oil and Gas Conservation Commission (AOGCC)

• Preparation and adherence to an ADEC-approved Oil Discharge Prevention and Contingency Plan (C-Plan).

<u>Jurisdictional Agency</u>: Alaska Department of Environmental Conservation (ADEC) Spill Prevention and Response Office

 Preparation and adherence to Facility Response Plans as required by the Oil Pollution Act of 1990.

<u>Jurisdictional Agency</u>: Minerals Management Service (MMS) and Department of Transportation Office of Pipeline Safety

• Preparation of a Spill Prevention Control and Countermeasures (SPCC) Plan as required by EPA.

<u>Jurisdictional Agency</u>: Department of Interior (DOI) and Minerals Management Service (MMS)

• Maintain membership in CISPRI, a federally-approved Oil Spill Removal Organization.

<u>Jurisdictional Agency</u>: U.S. Coast Guard and Department of Transportation Office of Pipeline Safety

Socioeconomic Resources:

• To minimize disturbance to set net fishing operations in the vicinity of the West Forelands, construction activities should be scheduled during periods when these seasonal fisheries are not active.

<u>Jurisdictional Agency</u>: United States Army Corps of Engineers (USCOE)

Subsistence Harvesting Resource:

• To a large extent, impacts associated with construction activities can be mitigated by scheduling construction activities to avoid harvesting periods and through close coordination (e.g.,meetings) with local residents.

<u>Jurisdictional Agency</u>: United States Army Corps of Engineers (USCOE)

• Other appropriate mitigation measures include those that minimize the likelihood of a major oil spill and reduce the environmental impacts of a spill if one were to occur. These mitigation measures have been identified under Water Quality Protection.

Jurisdictional Agency: Refer to those delineated under Water Quality Protection

Land and Shoreline Use and Management Resources:

• To the extent possible, Forest Oil would control/restrict public access to, in, and through areas that it owns (such as in the Kustatan area) or in areas under their operational control. The proposed project will be permitted, constructed, and operated consistent with local, state, and federal land use and management procedures, objectives, codes, and regulations.

Jurisdictional Agency: United States Army Corps of Engineers (USCOE)

Visual Aesthetics and Recreational Resources:

 Applicable mitigation measures include those presented previously under Water Quality Protection to minimize the probability and consequences of a major oil spill.

Jurisdictional Agency: Refer to those delineated under Water Quality Protection

Cultural, Historical, and Archaeological Resources:

• The proposed project has been configured to avoid locations of archaeological resources. Forest Oil is working with EPA and the State Historic Preservation Officer (SHPO) to ensure that the State and Federal objectives with regards to these resources are met. This effort includes development of a Programmatic Agreement; a draft of the agreement is provided in Appendix E. The Programmatic Agreement specifies procedures for mitigating potential impacts on cultural resources associated with construction of structures, roads, pipelines, drill pads, material sources, or other activities that may significantly disturb the ground surface or have other effect on historic properties.

Major provisions of the draft Programmatic Agreement include:

- Annual meetings/briefings between EPA, SHPO, Forest Oil and other interested
 parties will be held in Anchorage each year to discuss the previous year's activities
 and activities scheduled for the upcoming year.
- Annual staff training of project managers will be conducted on the identification of
 and procedures regarding cultural resources, including identification, discovery, and
 notification procedures when archaeological materials or historic buildings and
 structures are encountered. Also, cultural resource briefings for all field staff will be
 conducted at least once a month by the project archaeologist.
- All archaeological and historical work will be supervised by a qualified project archaeologist.
- Efforts must be made to identify historic properties in those areas where activities could affect historic properties, including background research, consolation, oral history interviews, and field investigations under the supervision of the project archaeologist.

- All discoveries will be submitted to EPA and SHPO for review and consultation; if the discovery may be significant, the project archaeologist will complete a determination of potential effect and submit it to EPA and SHPO. If necessary, a plan will be developed to lessen the potential adverse effect to the discovered property; written authorization from EPA, SHPO, and/or the ACHP is needed prior to starting work in the area of the discovery.
- Archaeological monitoring will be conducted and monitoring results will be submitted to EPA.
- Archaeological sites will be avoided to the extent possible. If disturbance is
 unavoidable, the project archaeologist will consult with EPA and SHPO to identify
 actions necessary to make a Determination of Eligibility to the National Register of
 Historic Places, prepare a mitigation plan, conduct activities in accordance with the
 plan.
- The project will not disturb known human burials or human remains. If human remains are inadvertently discovered during the course of activities, all activities will cease until the project archaeologist can investigate. The SHPO will be notified immediately. Treatment of Native-American and non-native remains is detailed in Appendix E.

Jurisdictional Agency: EPA NEPA Compliance Program

Summary:

An environmental assessment (EA) has been completed and is attached. Based on the EA findings and with consideration of the mitigation measures that should be implemented by the applicant, and in accordance with the guidelines for determining the significance of proposed federal actions (40 CFR Part 1508.27) and EPA criteria for initiating an Environmental Impact Statement (EIS) (40 CFR Part 6.605), EPA has concluded that Alternative 1- The Agency Preferred Alternative will not result in a significant effect on the quality of the human environment. In accordance with NEPA regulations at 40 CFR Part 1508.13, the findings of the EA are hereby incorporated by reference.

Alternative 1- The Agency Preferred Alternative will not significantly affect land use patterns or population, wetlands or flood plains, threatened or endangered species, farmlands, ecologically critical areas, historic resources, air quality, water quality, noise levels, fish and wildlife resources, nor will it conflict with approved local, regional, or state land use plans or policies. The proposal also conforms with all applicable federal statutes and executive orders. As a result of these findings, EPA has determined that an EIS will not be prepared. Consequently, EPA has determined that based on this Finding of No Significant Impact (FONSI) that EPA hereby approves the draft NPDES permit application.

Comments supporting or disagreeing with this *FONSI* may be submitted, within 30 days of the above issuance date of this *FONSI*, to the following address for consideration:

Matt Harrington

U.S. EPA Region 10

1200 Sixth Ave M/S- OW-130

Seattle, WA 98101

Additional copies of the EA can be obtained by calling Matt Harrington at (206) 553-0246 or are available for public review at the following locations:

U.S. EPA Region 10

Attention: Matt Harrington

1200 Sixth Ave M/S- OW-130

Seattle, WA 98101

No Administrative action will be taken for at least 30 days after the release of this *FONSI*. EPA will fully consider all comments before taking final action.

Sincerely,

Randall F. Smith

Director

Office of Water

No Administrative action will be taken for at least 30 days after the release of this *FONSI*. EPA will fully consider all comments before taking final action.

Sincerely,

Randall F. Smith

Director

Office of Water

<u>CONCURRENCES</u>						
<u>Initials:</u>						
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